

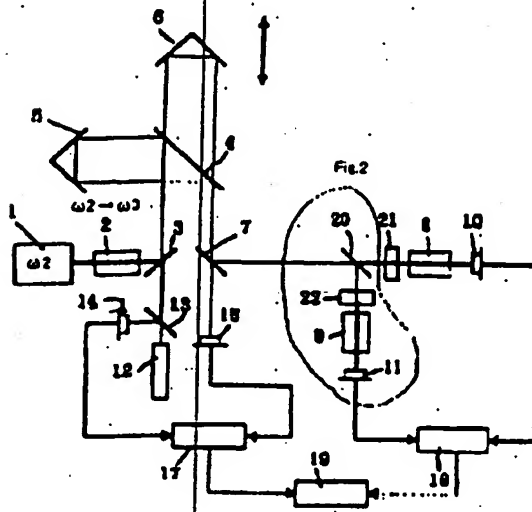
1) JP8-117083

2) Filed: Apr. 15, 1996

3) Inventors: Hitoshi Kawai, Jun Kawakami, Kouichi Tsukihara

4) Comment:

Reduction of crosstalk caused by light leakage at polarization beam splitter.



1: light source for index measurement

2: SHG element ( $\omega_2 \rightarrow \omega_3$ )

4: polarization beam splitter

5: reference path

6: signal path

12: light source to measure stage moving (like He-Ne laser)

17, 18: phase meter

19: calculator

20 to 11: for reference path index measurement (refer to Fig. 2)

20 to 10: for signal path index measurement

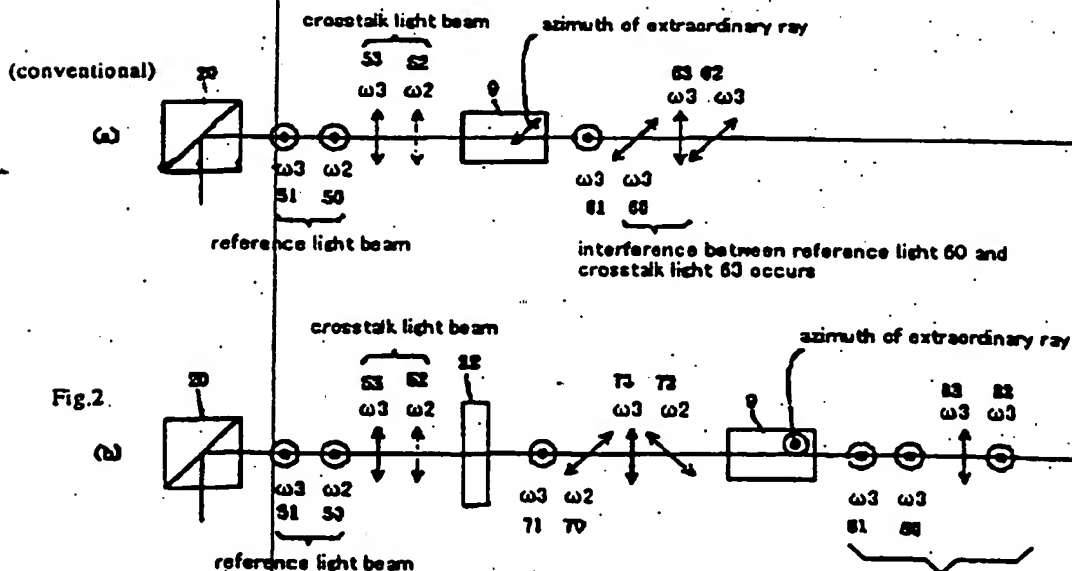


Fig. 2

interference between 81 and 82 occurs, but it's negligible, because light intensity of 82 is very weak under the action of SHG element 9.

9: SHG element

20: polarization beam splitter

22: It acts like  $\lambda$  plate for  $\omega_3$ , but also acts like  $\lambda/2$  plate for  $\omega_2$